

**ABSTRACT**

A ground penetrating antenna apparatus and method are provided for locating underground objects via radar, sonar, or similar methods. The apparatus includes one or more antennas that are rotatably affixed to support extensions that also rotate, but  
5 about an axis that is different from each of the antenna axes. The apparatus includes a linear propulsion mechanism, and the support extensions may be coupled to the linear propulsion mechanism via a transmission mechanism. In one embodiment, the supporting extensions rotate at a constant rate and each antenna rotates at that same constant rate but in the opposite direction.

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